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Masubuchi

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(54) **CONTROL SYSTEM FOR A MULTI-FUEL INTERNAL COMBUSTION ENGINE**

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See application file for complete search history.

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(57) **ABSTRACT**

The present invention is intended to suppress generation of a misfire and an increase in the amount of emission of HC, in a multi-fuel internal combustion engine of compression ignition type using, as fuels, a liquid fuel which can be ignited by compression and a gas fuel which is lower in ignitability than the liquid fuel. In the invention, in the same operating state, in cases where the liquid fuel and the gas fuel are caused to combust with the liquid fuel being used as an ignition source, the equivalent ratio of a mixture in a cylinder is made to increase, in comparison with the case where only the liquid fuel is caused to combust, and the rate of the increase of the equivalent ratio with respect to the case where only the liquid fuel is caused to combust is made smaller, when an engine load is low in comparison with the time when the engine load is high, and when an engine rotational speed is low in comparison with the time when the engine rotational speed is high.

4 Claims, 6 Drawing Sheets